

was actually burst and the pupil displaced, that the eye was flaccid and the iris tremulous, he expressed himself as having little expectation of the sight being restored. The displacement of the pupil, as observed in this case, was not an unusual effect of blows on the eye. It seemed to depend on an injury done to the ciliary ligament, or nerves, the iris at the part corresponding to the blow or injury, contracting and disappearing. On the other hand, from a blow the iris sometimes became separated or detached from the ciliary ligament, and then a double pupil was formed.

The treatment of the case was sufficiently simple; there was effusion of blood within the eye, but no sign of inflammation. The removal of blood was to be the work of nature; we could do little to help her, except by preventing inflammation, which would have interfered with the process, but of which there were no signs in this case. The patient was not bled, not even by having leeches applied. He was not of full habit, and had an indifferent pulse. He was purged, and kept on low diet, and cold was applied to the eye: these remedies were found sufficient.

Notwithstanding the unpromising appearance, the case turned out better than was anticipated. Seven days after his admission, he could distinguish light from darkness, and his sight gradually improved in proportion, apparently, to the removal of the blood from the interior of the eye. He took mercury with the view of aiding absorption, but the lecturer questioned if it had much to do with the improvement.

One day after the pupil became visible, the patient hearing him advert to the situation of it at the upper part of the eye, informed him that it had been so for the last four years. That at that time being in India, he had received a blow from a man; and that the nail of his thumb wounded his eye, and that the surgeon who attended him then told him of the alteration in the pupil. There is no reason to doubt the man's statement, though possibly, with regard to the injury by the nail, there might be some question, as he only mentioned this after hearing how the patient in the next bed had been injured. Since the accident in India his sight had not been so good as previously, yet up to the occurrence for which he entered the hospital, he was able to follow the calling of a newsman, and could read with the aid of glasses. He had now nearly recovered the same power of vision, and would leave the hospital next week.

62. *Symblepharon*.—M. PETREQUIN, of Lyons, has performed a somewhat novel operation for the cure of this species of deformity, the result apparently, in the case recorded, of repeated operations for pterygium. A gentleman of Clermont, Savoy, was affected with pterygia in each eye, caused by chronic engorgement. In 1834, Mayor, of Geneva, operated on him, and the left eye was perfectly cured; the pterygium in the right, on the contrary, returned at the end of a month, and was attended with pain and some difficulty in the motions of the eye. The second time he was operated on by M. Maunoir, but with temporary success. The pterygium returned, and increased rapidly. Ribéri, of Turin, who was next consulted, excised a portion of the caruncle with the pterygium, and applied caustic afterwards. This time fibrous bands formed, causing adhesion of the eyelids to the globe of the eye. These bands were excised by a physician at Chambéry, the operation being followed by large granulations, which were extirpated again and again, and finally repressed by the application of the sulphate of copper and nitrate of silver. Cicatrization took place gradually, but at the same time there formed a mass of fibrous bands, disposed fan-shape, the base attached to the internal surface of the two eyelids, the apex extending to and terminating on the cornea, which it partially covered to the extent of two lines (1-6th of an inch.) M. Petrequin saw the patient in this state on the 10th of April, 1841, and on examination found the eyelids bound together and to the eye, by a multitude of dense, fibrous bands, which rendered their motion very difficult. When the patient looked outwards to the right he had double vision, as also, but in a less degree, when he looked much to the left.

Cold, exposure to the air, reading, and writing were painful and fatiguing. He could not turn the eye outwards.

This case was not unattended with difficulty, in consequence of the great tendency to relapse and to an increase of the disease. Excision, incision, and the application of caustic, had already failed; a new operation was therefore requisite, which was performed in the following manner on the 13th:—A small curved needle, armed with a double thread, was passed between four or five of the fibrous bands of the lower eyelid and the globe of the eye, and the threads tied, the inner ligature being tied somewhat loosely. The operation was repeated the next day, the ligatures being placed external to those already applied. The eye was kept immovable, and bathed with cold water and laudanum. On the 15th the adhesions of the corneal side were broken; the part was touched with caustic alum, and a little charpie passed behind. The sulphate of copper was applied lightly the four following days; the other ligatures separated later; the lower eyelid was set at liberty, and became free and mobile, and a cure was effected. A similar operation was afterwards performed on the bands of the upper eyelid, but the results were not so successful. It was followed by a high degree of inflammation, requiring the application of leeches, mustard pediluvia, purgatives, &c. and when the patient left Lyons the eyelid was only partially freed, but its motions were more easy. M. Pétrequin heard from him six months afterwards, and he was doing well. A few months later he was informed indirectly that the improvement the patient had experienced had not continued entirely. A second case, of an equally interesting nature, is recorded by M. Pétrequin, in which the adhesion of the eyelids to the eye had been caused by the application of quick-lime. The patient was a young blacksmith, and had been operated on seven times unsuccessfully previously to his placing himself under the care of M. Pétrequin. The adhesion affected the lower eyelid chiefly at the external canthus, but the commissure was also engaged; the motions of the eye were difficult and painful, and there was present a degree of strabismus convergens, with diplopia, imperfect vision, &c. The ligatures were applied four or five times, each successive application being followed by apparent improvement. The first was applied on the 11th of July, and when the patient left the hospital on the 30th the adhesions were entirely destroyed, and vision perfect, but cicatrization was not quite completed. The patient was to return in September, if any contraction or difficulty of motion appeared afterwards, and, as he had not done so, M. Pétrequin concludes him cured.

The object of M. Pétrequin in applying a double ligature to these bands, tying one tightly, and the other more loosely, was, that the separation of the threads should take place at different times, so that the wound caused by the ligature tightly applied might be healed, or nearly so, before that to be produced by the more loose one, should be actually open, thus inducing cicatrization of each separately, and thereby preventing their reunion. The portion of the fibrous band between the two ligatures could not form adhesions to either wound, inasmuch as it was in a state of strangulation, and must necessarily fall atrophied. The more dense and fibrous the bands, the more easy is it to cause a difference of several days between the separation of the respective ligatures, attention being paid to their being tied in different degrees of constriction. If the bands are very thick, the ligatures must be applied again and again, the needle being passed each time deeper and deeper. After the operation, it is requisite to keep the eye perfectly motionless and closed, to prevent those motions, which might cause traction on the eye, and separate the ligatures sooner than was intended.—*Pron. Med. and Surg. Journ.* May 7, 1842, from *Gaz. Med. de Paris*.

[Of the safety of this operation of M. Pétrequin it will require farther experience to convince us. We have seen a case somewhat similar to that first related, and induced by the same cause, ill judged, repeated operations for the removal of pterygium. The operations of some modern surgeons on the eye can scarcely be exceeded in rudeness.]